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# Physicians' attitudes toward patients' use of alternative cancer therapies

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#### Abstract • Résumé

**Objectives:** To determine physicians' attitudes and reactions to their patients' use of alternative cancer therapies, factors that affect these reactions and physicians' views of how the use of such therapies affects the physician–patient relationship.

**Design:** Qualitative study involving in-depth semistructured interviews.

Setting: Toronto.

**Participants:** Nineteen oncologists and 35 general practitioners (GPs) were selected by means of purposive sampling; 18 oncologists and 12 GPs agreed to participate.

Outcome measures: Attitudes and reactions to patients' use of alternative cancer therapies; factors affecting physicians' reactions to such use; and physicians' views of how the use of such therapies affects the physician–patient relationship.

Results: Many physicians perceived themselves to be unfamiliar with available alternative cancer therapies and indicated that their main sources of information were their patients and the lay press. Although most of the physicians viewed the efficacy of such therapies as scientifically unproven, they would respect their patients' decision to use them and encourage them to continue with standard treatment. Factors found to influence the physicians' reactions included the prognosis with standard treatments, the exclusivity of the use of alternative therapies and whether the alternative therapies were harmful. Although many of the participants felt that a patient's use of alternative cancer therapies did not affect the physician–patient relationship, a few indicated that it did cause some tension.

**Conclusion:** Because many physicians lack information on alternative cancer therapies and most of these therapies have not been scientifically proven, physicians' attitudes and reactions to their use by patients are influenced to a greater degree by the efficacy or inefficacy of standard treatment and the invasiveness of the alternative therapy than by the efficacy of the alternative therapy used.

**Objectifs :** Déterminer les attitudes des médecins, comment ils réagissent lorsque leurs patients recourent à des thérapies parallèles contre le cancer, les facteurs qui jouent sur ces réactions et ce que les médecins pensent de l'effet que le recours à ces thérapies a sur leur relation avec leurs patients.

**Conception :** Etude qualitative comportant des entrevues semi-structurées détaillées.

Contexte: Toronto.

**Participants :** Dix-neuf cancérologues et 35 omnipraticiens ont été choisis par échantillonnage raisonné; 18 cancérologues et 12 omnipraticiens ont consenti à participer.

**Mesures des résultats :** Attitudes et réactions face au recours par les patients à des thérapies parallèles contre le cancer; facteurs qui jouent sur la réaction des médecins face à ce recours et opinions des médecins au sujet de l'effet que ce recours aux thérapies en question a sur leur relation avec leurs patients.

**Résultats**: Beaucoup de médecins estimaient ne pas bien connaître les thérapies parallèles disponibles contre le cancer et ont indiqué que leurs patients et la presse générale étaient leurs principales sources d'information. Même si la plupart des médecins étaient d'avis que l'efficacité scientifique de ces thérapies n'était pas démontrée, ils respecteraient la décision de leurs patients d'y avoir recours

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et les encourageraient à poursuivre le traitement normal. Parmi les facteurs qui jouent sur les réactions des médecins, mentionnons le pronostic si le patient reçoit des traitements conventionnels, le recours exclusif aux thérapies parallèles et leur nocivité possible. Même si beaucoup de participants étaient d'avis que le recours par un patient à des thérapies parallèles contre le cancer n'avait aucun effet sur la relation patient-médecin, quelques-uns ont indiqué qu'il en découlait des tensions.

Conclusion: Comme beaucoup de médecins manquent de renseignements sur les thérapies parallèles contre le cancer et comme la plupart de ces thérapies n'ont pas encore fait leurs preuves sur le plan scientifique, l'efficacité ou l'inefficacité du traitement conventionnel et la nature effractive de la thérapie parallèle ont plus d'effet que l'efficacité de la thérapie parallèle utilisée sur les attitudes des médecins et sur leurs réactions face au recours à ces thérapies par le patient.

About \$4 billion is spent each year in the United States and Canada on alternative cancer therapies (i.e., those other than standard biomedical therapies). <sup>1-3</sup> As many as 54% of people with cancer use alternative therapies, and up to half of these patients abandon standard medical treatment for these alternative methods. <sup>4-7</sup> In light of these figures, it is perplexing that little empirical research has systematically documented how physicians are responding to this phenomenon.

Most of the literature on patients' use of alternative cancer therapies focuses on the patient's perspective, 6-8 leaving physicians' views to be inferred largely from anecdotal comments and editorials by physicians in various medical journals. 3-5,9-15 In general, these physicians oppose patients' use of such therapies. Brigden, 4-5 for example, commented that a patient's use of alternative cancer therapies is especially disconcerting when that patient has a highly curable form of cancer, such as Hodgkin's disease.

The opinions expressed by physicians in editorials should be interpreted with caution, however, because these physicians are a self-selected group. In a survey of cancer patients 30% indicated that their physician supported the use of alternative treatments; for 12% the physician was neutral, for 39% their physician reacted with disapproval, and for 4% the physician refused to continue seeing them because of their use of an alternative therapy. Because physician behaviour was assessed from the patients' accounts, it is unclear to how many and what kind of physicians these results pertain.

Systematic research on physicians' views based on physicians' accounts focuses not on alternative cancer therapies specifically but, rather, on the broader use of alternative medicine. Much of this research has involved physicians in Europe, 16-19 Israel, 20 New Zealand 21.22 and the United Kingdom, 23-26 where attitudes toward alternative therapies are generally thought to be more positive than in North America.

Two recent studies, however, have examined the views of Canadian general practitioners (GPs) on alternative medicine. Goldszmidt and associates surveyed Quebec GPs and found that their self-reported knowledge of alternative health care services (chiropractic, acupuncture and hypnosis) was poor. Nevertheless, most of the physicians (83%) perceived these services to be of some use; interest in learning more about them was high (ex-

pressed by 48%), especially among female physicians; and referral of patients by GPs to practitioners of alternative health care was common (reported by more than 60%). Verhoef and Sutherland<sup>28</sup> surveyed GPs in Ontario and Alberta and also found referral to practitioners of alternative health care to be common (reported by 54%) and that roughly the same proportion believed that conventional medicine could benefit from the concepts and methods of alternative medicine. The main reasons for referring patients to alternative health care practitioners included a lack of response to conventional treatment (reported by 51%), patient request (21%) and the physicians' belief in the effectiveness of the alternative therapy for the specific disorder (21%). Both studies showed that physicians' knowledge of alternative health care practices increased with age and that female physicians were more likely than their male counterparts to find alternative therapies useful.

Although these two studies are informative, their exclusive use of a survey methodology does not permit an in-depth analysis of the reasoning behind physicians' reactions. Why are some physicians interested in training in alternative medicine? In what ways do physicians find alternative therapies to be useful or not useful? Why do some physicians practise alternative medicine? In addition, these two studies are limited in their focus on physicians in general practice. What are the views of specialists? Are they different? If so, why? Abundant literature suggests that there may be a difference in attitudes and behaviour between specialists and generalists.<sup>29-32</sup>

The purpose of this study was to examine systematically the attitudes and reactions of physicians toward their patients' use of alternative cancer therapies using an in-depth, qualitative research design. Cancer care was chosen for this analysis because standard cancer treatment has a wide range of efficacy, a factor that Verhoef and Sutherland<sup>28</sup> found to be important in affecting physicians' reactions (i.e., referral to practitioners of alternative therapies). The specific study objectives were to (a) describe physicians' familiarity with alternative cancer therapies and their attitudes and reactions toward their patients' use of such therapies; (b) identify factors influencing their attitudes and reactions; and (c) describe their views on the effect of patients' use of alternative cancer therapies on the physician–patient relationship.

#### **Methods**

A qualitative research design involving in-depth, semistructured interviews and grounded theory techniques of analysis was used.<sup>33,34</sup> Such qualitative methodologies are most appropriate for examining the perspective of participants and their contextual influences while appreciating the embedded and multifaceted nature of their perspectives. This methodology allowed for maximum exploration of the meaning of a participant's perspective.

The study began with an initial round of interviews with five oncologists and three GPs. These two groups of physicians (i.e., specialists and generalists) were chosen to ensure a diversity of experience with patients' use of alternative cancer therapies, which in turn would elicit a wide range of responses. Medical and surgical oncologists were selected from university-affiliated cancer centres in Toronto. All five oncologists agreed to participate. The GPs were randomly selected from solo and group practices in Metropolitan Toronto (including the City of Toronto, York, East York, North York, Scarborough and Etobicoke) through the Ontario Medical Directory.35 From a list of 20 GPs 3 agreed to be interviewed. Reasons for nonparticipation by the GPs included lack of patients with cancer, lack of time or unwillingness to do interviews, and absence due to leave or vacation.

Interviews were conducted in person by me in the physician's office, and each lasted from 20 minutes to over 1 hour. Following a semistructured interview guide, participants were asked about their familiarity with alternative cancer therapies, their experiences with patients' use of such therapies, their attitudes and reactions to their patients' use of such therapies and the effect of such use on their relationship with patients. Throughout the interview, participants were allowed to explain fully their perspective and identify important factors that influenced their opinion. Unstructured questions (i.e., probes) were used to help obtain further depth and completeness to physicians' responses and to help identify relationships between responses.

Analysis of the interview data occurred simultaneously with collection through systematic, documented procedures of grounded theory.33,34 Each interview was taped, transcribed verbatim and prepared for analysis using The Ethnograph,36 a computer program designed for the management of qualitative data. With the use of the numbered printout of the transcribed interviews from The Ethnograph, codes were applied to common words and phrases, which were subsequently sorted according to these codes to help condense the interview data and identity common characteristics among physicians' responses. Codes were then organized into higher-level categories or themes. Physicians' responses were subsequently analysed to identify relations between themes. The coding scheme and its application to the eight initial interviews were reviewed by an experienced qualitative health researcher. Confidentiality was ensured through the use of code names.

Through this initial analysis three factors emerged as being critical to physicians' attitudes and reaction to patients' use of alternative cancer therapies: the invasiveness of the alternative therapy being used, whether the alternative therapy was being used to supplement or replace standard care, and the efficacy of standard therapy for the patient's type of cancer. These themes were subsequently "tested" in interviews with a follow-up group of physicians to help confirm the validity and to understand better the relative importance of these themes. Questions addressing the three themes became incorporated into the interview guide. Thus, participants were asked not only about their general thoughts and experiences with patients' use of alternative cancer therapies, but also about their attitudes and behaviour regarding specific circumstances arising from the type of treatment used, the prognosis with standard treatment and the exclusivity of the patients' use of alternative therapies (i.e., whether they were being used as a supplement to or a replacement of standard therapy).

Oncologists and GPs were again selected as participants in the follow-up interviews. Fourteen oncologists were selected, again from university-affiliated cancer centres in Toronto; 13 were interviewed. A list of 15 GPs was drawn up using a snowball sampling technique (i.e., referral from other study participants); 9 were interviewed. Reasons for nonparticipation were the same as those already described. Interviews were again conducted in person by me in the physician's office, and each lasted from 30 minutes to over 1 hour. All follow-up interviews were taped, transcribed verbatim, coded and analysed as described above.

#### Results

#### Physicians' characteristics

The demographic characteristics of the study participants are given in Table 1. More oncologists than GPs were selected to participate in the study, largely because the topic was more relevant to oncologists. Seven of the 30 participants were women, a proportion roughly equal to that of physicians currently in practice in Canada. The age distribution did not differ between the oncologists and the GPs.

#### Familiarity with alternative cancer therapies

Although most (23) of the participants, particularly the oncologists, indicated that they had at least some experience with patients using alternative cancer therapies, over half (14) regarded themselves as relatively unfamiliar with such therapies. One oncologist stated: "I think I probably know intimately 0.05% of what there is. If I

know Can-cell and 714x and Laetrile and a few others, that, I would imagine, represents approximately half a drop in the bucket. I imagine for every one I know there are 200 others."

Despite the fact that the participants were relatively unfamiliar with alternative cancer therapies, many examples were cited (Table 2). The physicians indicated that their source of information about such therapies would most likely be their patients or sources as readily available to patients as they are to physicians (e.g., newspapers). Few reported obtaining information from traditional medical routes such as scientific journals and medical colleagues. One oncologist explained that "it is an area that is very difficult to get at except through patient sources; someone has a pamphlet, they show it to someone else, etc." Experience with patients' use of alternative therapies was thus a major factor influencing physicians' knowledge of such therapies.

#### Attitudes toward efficacy of alternative cancer therapies

The participants expressed a variety of attitudes toward the effect (i.e., benefit or harm) of patients' use of alternative cancer therapies. Some indicated that a few alternative therapies were toxic. Use of alternative therapies was also considered harmful if the therapy prevented, delayed or otherwise interfered with a patient receiving effective conventional treatment. One oncologist stated that "an alternative therapy might not be harmful per se, but if [it] deprives or delays a patient from receiving curative therapy, . . . then [it is] harmful."

In addition, some of the physicians felt that alternative cancer therapies are harmful psychologically, because of the false hope they give patients, and financially, because of their often exorbitant cost. One GP recounted that "many people have squandered maybe their life savings, their children's future, education . . . on a treatment that is of no proven benefit."

At the other end of the spectrum, a few physicians felt that some alternative therapies, especially those involving positive thinking and attitudinal approaches (i.e., guided imagery, hypnosis and relaxation), were psychologically beneficial. One GP expressed the following: "I think there could be [psychological benefit] . . . if the person has confidence in [the alternative therapy] and really believes it may be working, it will make them feel better. . . . We really don't know what kind of effect that one's emotions and mental attitudes have towards healing, so there is a potential there that it could help just by giving them confidence."

The crux of the physicians' opinions, however, was that alternative cancer therapies have not been scientifically proven to be efficacious. "The problem with alternative therapies," as highlighted by one of the oncologists, "is that one can't assess their efficacy because they are not allowing themselves to be studied in a way that

would permit that information from ever being known." A GP commented that often there is "no solid proof or evidence that [the alternative therapy] does any good, or ... does any harm." Physicians indicated that if alternative cancer therapies were proven to be effective they would be adopted as part of standard medical treatment.

### Reactions to patients' use of alternative cancer therapies

The participants expressed mixed views regarding patients' use of alternative cancer therapies. Responses ranged from general support to outright opposition. The variability of responses reflected the different ways in which each physician conceived that the alternative therapies were being used. For example, many of the physicians reported being "open-minded" and "tolerant" but limited this open-mindedness to specific situations. As highlighted earlier, three main factors were found to affect physicians' reactions: the invasiveness of the alternative therapy being used by the patient, the exclusivity of such use and the physicians' opinion of the patient's prognosis with standard medical treatment (Fig. 1).

Most of the participants were not as supportive of the more invasive therapies (e.g., coffee enemas) as they were of the less invasive ones (e.g., psychological and attitudinal approaches). Many felt that the attitudinal approaches (e.g., imagery, positive thinking and meditation) were not really alternative therapies but, rather, were useful adjuncts to standard treatments.

Table 1: Characteristics of physicians, their familiarity with alternative cancer therapies and their experience with patients' use of such therapies

Variable	Oncologists $n = 18$	General practitioners $n = 12$	Total n = 30
Sex	197		
Male	15	8	23
Female	3	4	7
Age, yr			
< 40	5	3	10
40–60	10	8	16
> 60	3	1	4
Familiar with alternative cancer therapies			
Not	8	6	14
Somewhat	8	5	13
Very	2	1	3
Experience with patients' use of alternative cancer therapies			
None	0	1	1
Little	3	5	8
Some	10	6	16
Much	5	0	5

In general the participants had no problem with approaches that might augment or complement standard treatment. Most, however, were opposed to the use of

alternative therapies if they replaced standard therapy. The exclusivity of the use of alternative therapies was of utmost importance to all of the physicians if the stan-

	Group; no. of physicians who cited example		
Alternative cancer therapy	Oncologists $n = 18$	General practitioners $n = 12$	Total n = 30
Laetrile	12	7	19
Special diet (e.g., macrobiotic diet)	12	2	14
Psychospiritual method (e.g., positive thinking, imagery or relaxation)	7	6	13
Essiac	9	2	11
Herbal therapy	5	4	9
Megavitamin therapy	6	3	9
Miscellaneous potions (e.g., Can-cell and Iscador)	8	rotle of all ted	9
Coffee enema	6	1	7
Hypothermia	3	3	6
Antineoplastin	4	0	4
Immunotherapy	4	0	4
Naturopathy	2	2	4
Acupuncture	ant 100 hol	2	3
Homeopathy	0	3	3

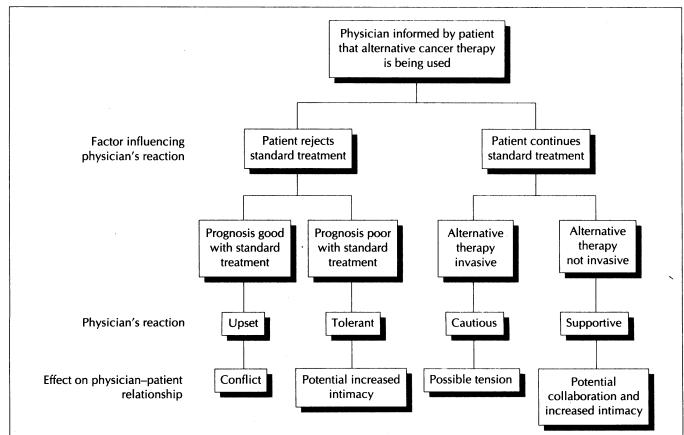


Fig. 1: Framework of physicians' attitudes and reactions to their patients' use of alternative cancer therapies and the effect of such use on physician-patient relationships.

dard treatment available was proven to be effective. One oncologist stated that "if I know there is a 98% chance of curing this patient with an operation and there is a 100% chance she will die without the surgery, I would loathe for that patient to utilize an alternative treatment." Another described that "in the curable situation, I get very exercised and very upset." Many physicians indicated that they would "argue quite strongly against" a patient making that kind of "tragic" decision because the patient was essentially "making a big mistake" and "putting their lives in jeopardy."

In situations in which no standard treatment is available, physicians were less likely to be so adamantly opposed to the use of alternative therapies. For example, one of the oncologists said that "if I have a patient with a disease that has no hope of cure with my treatment, then I am much less resistant to [him or her] trying alternative types of therapy."

Most of the physicians said that if the alternative therapy a patient wanted to use was not harmful, their behaviour toward or management of the patient's disease would not change. They indicated that they would neither "forbid" the patient from taking an alternative therapy nor "refuse to provide further care" but, rather, would stress the beneficial or potentially beneficial effects of the standard treatment recommended for the type of cancer in question and encourage patients to stick with standard care. The decision, the physicians asserted, was ultimately the patient's. A few of the participants indicated that they had referred or would refer patients to practitioners of alternative cancer therapies, mainly those who offered the psychological approaches of imaging and relaxation, to help deal with some of the side effects of standard therapy. These responses were expressed equally often by the oncologists and the GPs.

#### Effect on physician-patient relationship

When asked what effect patients' use of alternative cancer therapies had on their relationship with them, physicians responded in three ways: negative effect, no effect and positive effect (Fig. 1). Eleven of the physicians said that in certain circumstances such use strained the relationship and caused tension and sometimes conflict. The physician–patient relationship was especially tense if the patient was in denial about having cancer or rejected the recommended standard medical treatment. Some of the physicians felt this to be an affront to their trustworthiness. For example, one oncologist commented that "what [patients] are saying to us is that they don't think we are doing everything [we can] — the patient does not completely trust us."

Nineteen of the physicians indicated that there was no effect on the relationship and that, for the most part, the use of alternative therapies was irrelevant if it did not interfere with their practice of medicine. Many also indicated that they often do not know whether a patient is using an alternative therapy. As one oncologist said, "I am sure that I don't hear about everything that my patients do."

Two of the physicians felt that under certain circumstances patients' use of alternative therapies enhanced the physician-patient relationship. One oncologist indicated that this issue allowed him to have more open and frank discussions with his patient: "I think it heightens your relationship with them; you become more intimate with the patient. You can discuss things a lot more easily and freely." Another oncologist said that if the patient brings up the topic, this indicates a good relationship between the physician and patient. Some of the physicians also noted the possibility for collaboration and an increased sense of control for patients using alternative therapies. As one physician stated, "If people partake in alternative therapies that [as far as] I can tell are not going to be harmful, I certainly don't fight it because it helps maintain the patient's construct that they are in fact involved in fighting the tumour." A few of the participants felt that this was especially helpful when patients sought control over the side effects of standard therapy.

#### Discussion

Physicians in this study generally viewed alternative cancer therapies as scientifically unproven remedies on which little information regarding their efficacy was available. Overall, they expressed a tolerant and sometimes positive reaction toward patients' use of such therapies unless it was considered physiologically, psychologically or financially harmful, or was chosen by patients instead of a standard therapy scientifically proven to be highly effective. Because many of the physicians lacked information on alternative cancer therapies and most of these therapies have not been scientifically proven, the physicians' attitudes and reactions to the use of them by their patients were influenced to a greater degree by the efficacy or inefficacy of standard treatment and the invasiveness of the alternative therapy than by the efficacy of the alternative therapy used. Despite differences in familiarity and experience with their patients' use of alternative cancer therapies, the oncologists and GPs expressed similar views in this regard.

That the physicians in this study viewed alternative therapies as unproven is consistent with the findings of Baum, who argued that the distinction between alternative and standard cancer treatments is in the evaluation of the treatments and the quality of evidence that supports their claims of efficacy. This is how alternative cancer therapies are generally viewed in the medical community. 38-48

That the participants expressed negative views if their patients chose to forego effective standard treatment concurs with the findings of Brigden, 4.5 who emphasized that this was the case when the alternative therapy was particu-

larly harmful. The variability in the physicians' responses to patients' decisions to forego standard treatment depending on the prognosis is consistent with Gilbar's research into physicians' attitudes toward patients' refusal of chemotherapy.49 He found that physicians did not attempt to persuade every patient who refused chemotherapy to change their decision, especially when the chemotherapy was believed to be of limited effectiveness.

The opinions expressed in this study are somewhat more negative than was expected, given the results of previous Canadian surveys.<sup>27,28</sup> Perhaps the participants in this study were more accepting of the use of alternative medicine for conditions other than cancer or viewed practitioners of alternative cancer therapies differently from those of other alternative therapies. Perhaps the methodology used in this study, which allowed probing into physicians' responses through specific examples of extreme cases, elicited responses that went beyond socially desirable answers that are often obtained in survey research. Probing also uncovered some of the more positive aspects of potential intimacy and collaboration noted by some of the physicians that patients' use of alternative cancer therapies entailed.

This study had limitations in the representativeness of the sample. Physicians in other areas of the province or country, particularly those in rural settings, may have different views. Despite these limitations, this exploratory study highlights some of the salient issues reflected in physicians' views of patients' use of alternative medicine and thus provides the basis for further investigation.

Clinical implications: Physicians' eliciting as much information as possible about whether their cancer patients are using alternative therapies and what kind of therapies they are using may be beneficial to the physician-patient relationship and, ultimately, to the delivery of care.

**Study limitations:** The information obtained in this study may be limited in generalizability.

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